

REMARKS

Claims 1-36 are pending, with claims 1, 2, 8, 16, and 26 being independent. Claims 1-14, 16, 18-28, 30, and 32-36 have been amended and a second claim 18 has been canceled by this response. In view of the foregoing amendments and following remarks, reconsideration and allowance of this application are respectfully requested.

Claim rejections under 35 USC 112

Claims 1-36 have been rejected under 35 USC 112, second paragraph, as being indefinite. Each basis of rejection is now discussed in order.

a. In claim 1, the phrase “resource management device” has been indicated as being indefinite because it is not clear whether this device is in the host or not, nor which host it is in. This rejection has been rendered moot by the amendment to claim 1. Specifically, Applicant has amended claim 1 to recite that the resource management device is “within one of the hosts.” Therefore, it is respectfully requested that this rejection be withdrawn.

b. In claim 1, the phrase “first information” recited in line 3 has been indicated as being indefinite due to not having sufficient antecedent basis. Applicant respectfully disagrees. The phrase “first information” was recited for the first time in line 3, without the prefix “said” or “the.” However, to expedite prosecution of this claim, Applicant has amended claim 1 to recite that the first information is “received by the resource management device.” Therefore, it is respectfully requested that this rejection be withdrawn.

c. In claim 1, the phrase “second information” recited in line 4 has been indicated as being indefinite due to not having sufficient antecedent basis. Applicant respectfully disagrees. The phrase “second information” was recited for the first time in line 4, without the prefix “said” or “the.” However, to expedite prosecution of this claim, Applicant has amended claim 1 to recite

that the second information is “received by the resource management device.” Therefore, it is respectfully requested that this rejection be withdrawn.

d. In claim 2, the phrase “resource management device” has been indicated as being indefinite because it is not clear whether this device is in the host or not, nor which host it is in. This rejection has been rendered moot by the amendment to claim 2. Specifically, Applicant has amended claim 2 to recite that the resource management device is “of the host.” Therefore, it is respectfully requested that this rejection be withdrawn.

e. In claim 2, the phrase “managed characteristic application” has been indicated as being indefinite because it is not clear who manages the characteristic application program, and that the term is not defined in the claim language. This rejection has been rendered moot by the amendment to claim 2. Specifically, Applicant has amended claim 2 to recite, first, that the managed characteristic application is a “computer program,” such that its definition is even more clear (i.e., the phrase refers to an actual computer program). Second, Applicant has amended claim 2 to recite that this computer program is managed “by at least the host.” Therefore, it is respectfully requested that this rejection be withdrawn.

f. In claim 2, the phrase “which one of starts up” has been indicated as being indefinite as not making any sense. This rejection has been rendered moot by the amendment to claim 2. Applicant has removed the language “which one of” from the claim, and has amended the claim to recite that the signals include a first signal, a second signal, and a third signal that start up, shut down, and move compute programs as delineated in the claim. Therefore, it is respectfully requested that this rejection be withdrawn.

g. In claim 2, the phrase “additional copy” has been indicated as being indefinite because a first copy was never introduced. This rejection has been rendered moot by the amendment to

claim 2. Applicant has amended the claim to recite “a copy.” instead of an “additional copy.” Therefore, it is respectfully requested that this rejection be withdrawn.

h. In claim 2, the phrase “one of the host” has been indicated as being indefinite because it does not make any sense. Applicant respectfully disagrees. The claim recites “on one of the host and a second networked host.” As such, the “one of” language refers to “one of” the host and a second networked host and therefore means either the host or the second networked host. Therefore, it is respectfully requested that this rejection be withdrawn.

i. In claim 2, the phrase “all applications” has been indicated as being indefinite because only one application was previously introduced. This rejection has been rendered moot by the amendment to claim 2. Applicant has amended claim 2 to recite “a plurality of application computer programs including the managed characteristic application computer program.” Therefore, it is respectfully requested that this rejection be withdrawn.

j. In claim 2, the phrase “first information” in line 5 has been indicated as being indefinite due to insufficient antecedent basis. Applicant respectfully disagrees. The phrase “first information” was recited for the first time in line 5, without the prefix “said” or “the.” However, to expedite prosecution of this claim, Applicant has amended claim 2 to recite that the first information is “received by the resource management device.” Therefore, it is respectfully requested that this rejection be withdrawn.

k. In claim 2, the phrase “second information” recited in line 6 has been indicated as being indefinite due to not having sufficient antecedent basis. Applicant respectfully disagrees. The phrase “second information” was recited for the first time in line 6, without the prefix “said” or “the.” However, expedite prosecution of this claim, Applicant has amended claim 2 to recite that

the second information is “received by the resource management device.” Therefore, it is respectfully requested that this rejection be withdrawn.

l. In claim 8, the phrase “resource management device” has been indicated as being indefinite because it is not clear whether this device is in the house or not, nor which host. This rejection has been rendered moot by the amendment to claim 8. Applicant has amended claim 8 to recite that the device is “within one of the hosts.” Therefore, it is respectfully requested that this rejection be withdrawn.

m. In claim 8, the phrase “managed characteristic application” has been indicated as being indefinite because it is not clear who manages the characteristic application program, and that the term is not defined in the claim language. This rejection has been rendered moot by the amendment to claim 8. Applicant has amended claim 8 to recite, first, that the managed characteristic application is a “computer program,” such that its definition is even more clear (i.e., the phrase refers to an actual computer program). Second, Applicant has amended claim 8 to recite that this computer program is managed “by one of the hosts.” Therefore, it is respectfully requested that this rejection be withdrawn.

n. In claim 8, the phrase “first information” in line 6 has been indicated as being indefinite due to insufficient antecedent basis. Applicant respectfully disagrees. The phrase “first information” was recited for the first time in line 6, without the prefix “said” or “the.” However, to expedite prosecution of this claim, Applicant has amended claim 8 to recite that the first information is “received by the resource management device.” Therefore, it is respectfully requested that this rejection be withdrawn.

o. In claim 8, the phrase “second information” recited in line 7 has been indicated as being indefinite due to not having sufficient antecedent basis. Applicant respectfully disagrees. The

phrase "second information" was recited for the first time in line 7, without the prefix "said" or "the." However, to expedite prosecution of this claim, Applicant has amended claim 8 to recite that the second information is "received by the resource management device." Therefore, it is respectfully requested that this rejection be withdrawn.

p. In claim 8, the phrase "control configuration" in line 2 has been indicated as being indefinite due to insufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 8. Applicant has amended claim 8 to recite "a control configuration." Therefore, it is respectfully requested that this rejection be withdrawn.

q. In claim 16, the phrase "managed characteristic application" has been indicated as being indefinite because it is not clear who manages the characteristic application program, and that the term is not defined in the claim language. This rejection has been rendered moot by the amendment to claim 16. Applicant has amended claim 16 to recite, first, that the managed characteristic application is a "computer program," such that its definition is even more clear (i.e., the phrase refers to an actual computer program). Second, Applicant has amended claim 16 to recite that this computer program is managed "by the N hosts." Therefore, it is respectfully requested that this rejection be withdrawn.

r. In claim 16, the letters "N" and "M" have been indicated as being indefinite because it is not clear whether these are variables or whether they present static numbers, as well as whether N is different than M. This rejection has been rendered moot by the amendment to claim 16. Applicant has amended claim 16 to recite that "M and N" are each "a positive integer," and further that "M may be equal to, less than, or greater than N." Therefore, it is respectfully requested that this rejection be withdrawn.

- s. In claim 16, the phrase “the state and health” in line 4 has been indicated as being indefinite because there is insufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 16. Specifically, Applicant has amended the claim to recite “a state and health.” Therefore, it is respectfully requested that this rejection be withdrawn.
- t. In claim 16, the phrase “Quality of Service (QoS)” has been indicated as being indefinite for lack of sufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 16. Specifically, Applicant has amended the claim to recite “a plurality of Quality of Service (QoS) requirements.” Therefore, it is respectfully requested that this rejection be withdrawn.
- u. In claim 16, the phrase “Quality of Service (QoS)” has been indicated as being indefinite because it is not clear what the requirements involving this term are. This rejection has been rendered moot by the amendment to claim 16. In particular, Applicant has amended claim 16 to recite that the QoS requirements specifically “dictat[e] parameters regarding service quality of the M management characteristic application programs.” Therefore, it is respectfully requested that this rejection be withdrawn.
- v. Claim 18 has been indicated as being indefinite because there are two different claim 18s. Applicant has cancelled one of the claim 18s, and submits that the remaining claim 18 is not indefinite.
- w. In claim 26, the letters “N” and “M” have been indicated as being indefinite because it is not clear whether these are variables or whether they present static numbers, as well as whether N is different than M. This rejection has been rendered moot by the amendment to claim 26. First, Applicant notes that claim 26 continues to recite that “M and N are positive integers.” Second,

Applicant has amended claim 26 to recite that “M may be equal to, less than, or greater than N.” Therefore, it is respectfully requested that this rejection be withdrawn.

x. In claim 26, the phrase “managed characteristic application” has been indicated as being indefinite because it is not clear who manages the characteristic application program, and that the term is not defined in the claim language. This rejection has been rendered moot by the amendment to claim 26. Applicant has amended claim 26 to recite, first, that the managed characteristic application is a “computer program,” such that its definition is even more clear (i.e., the phrase refers to an actual computer program). Second, Applicant has amended claim 26 to recite that this computer program is managed “by one of the N networked hosts.” Therefore, it is respectfully requested that this rejection be withdrawn.

y. In claim 26, the phrase “the state and health” in line 8 has been indicated as being indefinite because there is insufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 26. Applicant has amended the claim to recite “a state and health.” Therefore, it is respectfully requested that this rejection be withdrawn.

z. In claim 26, the phrase “Quality of Service (QoS)” has been indicated as being indefinite for lack of sufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 26. Applicant has amended the claim to recite “a plurality of Quality of Service (QoS) requirements.” Therefore, it is respectfully requested that this rejection be withdrawn.

aa. In claim 26, the phrase “Quality of Service (QoS)” has been indicated as being indefinite because it is not clear what the requirements involving this term are. This rejection has been rendered moot by the amendment to claim 26. Applicant has amended claim 26 to recite that the QoS requirements specifically “dictat[e] parameters regarding service quality of the M

management characteristic application programs.” Therefore, it is respectfully requested that this rejection be withdrawn.

bb. In claim 26, the phrase “Quality of Service (QoS)” has been indicated as being indefinite for lack of sufficient antecedent basis. This appears to be the same rejection as z. above. As with the rejection discussed above with respect to item z, this rejection has been rendered moot by the amendment to claim 26. Applicant has amended the claim to recite “a plurality of Quality of Service (QoS) requirements.” Therefore, it is respectfully requested that this rejection be withdrawn.

cc. In claim 26, the phrase “general-purpose” has been indicated as a relative term that renders the claim indefinite. This rejection has been rendered moot by the amendment to claim 26. In particular, Applicant has amended claim 26 so that this phrase is no longer present. Therefore, it is respectfully requested that this rejection be withdrawn.

dd. In claim 35, the phrase “Program Control” has been indicated as being indefinite for lack of sufficient antecedent basis. This rejection has been rendered moot by the amendment to claim 35. Applicant has amended claim 35 so that this phrase is no longer present. Therefore, it is respectfully requested that this rejection be withdrawn.

#### Claim rejections under 35 USC 103

##### *Claims 1 and 16-32*

Claims 1 and 16-32 have been rejected under 35 USC 103(a) as being unpatentable over Bhattal (2002/0064126) in view of Du (6,041,306). Claims 1, 16, and 26 are independent claims, from which the remaining of the claims rejected over Bhattal in view of Du ultimately depend.

Applicant asserts that claims 1, 16, and 26, as amended, are patentable over Bhattal in view of Du, such that all of claims 1 and 16-32 are patentable over Bhattal in view of Du.

Claim 1 is limited to a resource management device generating signals that “startup, shutdown or move a selected one of the copies” of a scalable application *computer program*. The Examiner relies specifically on Bhattal in finding such a device that generates signal that startup, shutdown, or move a selected scalable application computer program. However, Applicant submits that Bhattal does not disclose the startup, shutdown, or moving of a scalable application *computer program* in particular, such that Bhattal in view of Du does not disclose the claimed invention of claim 1.

Paragraphs [0014]-[0016] of Bhattal, which the Examiner has relied upon, specifically relate to the starting of “an instance of a *channel*,” not a computer program as recited in claim 1. An example of a channel is shown as the channel 60 of FIG. 1 of Bhattal, which allows application computer programs 20 and 40 to send messages to one another. Thus, it is not the application computer programs 20 and 40 that are started up, shutdown, or moved in Bhattal, as recited in claim 1, but rather the communication channel 60. A channel, however, is not an application computer program. Rather, it “is a one-way communication link between two queue managers.” (Para. [0034]) As such, Bhattal in view of Du does not render claim 1 obvious.

Furthermore, Bhattal, and thus Bhattal in view of Du, has nothing to do with starting up, shutting down, or moving instances of computer programs. There is thus no motivation to modify Bhattal to substitute computer programs for its channels. Indeed, to substitute computer programs for the channels of Bhattal in view of Du destroys the operation of Bhattal. Simply put, a communication channel allows for communication between two computer programs; the same cannot be said of a computer program itself. Therefore, Bhattal in view of Du cannot be modified to yield the recited limitations of claim 1.

Similarly, independent claims 16 and 26 recite the movement, startup, and shutdown of application computer programs -- specifically, managed characteristic application programs.

Therefore, claims 16 and 26 are patentable over Bhattal in view of Du for at least the reasons discussed above with respect to claim 1.

Furthermore, claims 16 and 26 are patentable over Bhattal in view of Du because each recites Quality of Service (QoS) requirements ultimately resulting in the movement, startup, or shutdown of application computer programs. For instance, as amended, claims 16 and 26 are limited to “application computer programs [being] moved, shutdown, and started in accordance with satisfaction of the QoS requirements.” Applicant submits that Bhattal in view of Du does not disclose such reliance on QoS requirements.

The Examiner specifically relies on Du to disclose QoS requirements, in column 11, lines 16-18 thereof. This part of Du reads as follows:

7. Get customer's approval of the selected configuration. *Once a suitable path is identified, the customer will review the offer, including available date, charges, quality of services (QoS), and so on.* Depending upon the business factors (e.g., cheapest service wanted), the customer may request that a new search be initiated, that is, loop back to step 5 to find another valid route.

(Col. 11, lines 15-21) This seventh step in Du is part of a process that relates to a customer requesting “to add or drop communication paths between certain endpoints in a private virtual network (PVN).” (Col. 10, ll. 42-43) The process is specifically for “[a]dding a new path[, which] may consist of the following activities and decision points” (col. 10, ll. 45-47), where the seventh step recited above is one of those activities and decision points. That is, Du, and thus Bhattal in view of Du, relies upon QoS requirements as to the process followed for *adding a new communication path* – not for the movement, startup, or shutdown of application computer programs, as in the claimed invention of claims 16 and 26. Therefore, Du, and thus Bhattal in view of Du, does not render the invention of claims 16 and 26 obvious.

Du, and thus Bhattal in view of Du, further is not properly modified to yield reliance upon QoS requirements for moving, starting up, or shutting down application computer programs, as in claims 16 and 26. There is no motivation for replacing the communication paths of Du for the application computer programs of the claimed invention insofar as reliance upon QoS

requirements is concerned. Indeed, Du, and thus Bhattal in view of Du, uses QoS requirements in responding to a customer's request as a business decision, performed by businesspeople (e.g., step 7 is to get the customer's approval) – Du, and thus Bhattal in view of Du, does not have its *software* use QoS requirements at all, unlike the invention of claims 16 and 26. Replacing the communication paths of Du with the application computer programs of claims 16 and 26 changes the focus of Du, still does not cause the computer software of Du to rely upon QoS requirements, and results in Du's process being unsuitable for responding to customer requests for new communication channels. Therefore, Du, and thus Bhattal in view of Du, cannot be modified to yield the limitations recited by claims 16 and 26.

*Claims 2, 4-8, and 10-15*

Claims 2, 4-8, and 10-15 have been rejected under 35 USC 103(a) as being unpatentable over Bhattal. Claims 2 and 8 are independent claims, from which claims 4-7 and 10-15 ultimately depend. Applicant submits that as amended, claims 2 and 8 are patentable, and claims 4-7 and 10-15 are patentable for at least the same reason as claims 2 and 8. Similar to claim 1, claims 2 and 8 each recite an application computer program being started up, shutdown, or moved. As discussed with respect to claim 1, however, Bhattal is limited to the startup, shutdown, or movement of *communication channels*, not computer programs. Therefore, for the reasons discussed above with respect to claim 1, Bhattal does not render claims 2 and 8 unpatentable.

*Claims 3 and 9*

Claims 3 and 9 have been rejected under 35 USC 103(a) as being unpatentable over Bhattal in view of Du. Claims 3 and 9 are dependent claims, depending ultimately from claims 2 and 8, and therefore are patentable for at least the reasons discussed above with respect to claims 2 and 8.

Conclusion

Applicant asks that all claims be allowed. No fee is believed to be due. Please apply any other charges or credits to Deposit Account No. 50-0967.

Respectfully Submitted,

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Date



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